



## **Total Maximum Daily Load (TMDL) Program** **Clean Water Act (CWA) Section 303(d) Federal Requirement**

### **TMDL Status Report As of November 2002** **TMDLs Due to EPA Region 5, FY 2003** **and** **De-Listing of Impaired Waterbodies**

#### **Sampling, Analysis and Data Collection for TMDLs Development:**

The TMDL is fairly a new program for IDEM. The TMDL program was initiated at IDEM in 1998. Starting in 1998 through 2002, a number of waterbodies listed on the Indiana 1998 303(d) list have been sampled by IDEM staff for data collection, analyzed at IDEM's Contract Laboratories and the data QA/QC'ed by IDEM staff for TMDLs development. Simultaneously, the Grand Calumet River (GCR) and Indiana Harbor Canal (IHC) Waterbodies (5 Segments) were sampled by U.S. ACOE Contractors/Stakeholders in 1999 and 2000. The Fall Creek, Pleasant Run and WF-White River (3 segments in Marion County, and 3 segments in Muncie, Marion and Hamilton Counties) were sampled by the City of Indianapolis and by IDEM staff, respectively, for data collection and TMDLs development.

#### **TMDLs Developed or Under Development:**

One TMDL was completed, and approved by EPA in January 2001, and a number of waterbodies that are now under Contracts for TMDLs development are listed in Table 1. The fundings source for Contract support for completing these TMDLs includes State Funds, U.S. ACOE, Federal 319, 104(b)(3), 205(j) grants, and in kind services from IDEM. These TMDLs will be delivered to IDEM in 2003. The breakdown of these TMDLs is as follows:

- 1 TMDL for the Wildcat Creek/Kokomo Creek watershed in the Wabash River Basin was completed, submitted and approved by EPA.
- 14 TMDLs for *E. coli* and other parameters are under development with various Contractors. These TMDLs will be due to EPA Region 5 in 2003.
  - 3-5 TMDLs from 5 GCR/IHC watersheds in the Lake Michigan Basin.
  - 5 TMDLs from 5 additional waterbodies from Lake Michigan Basin.
  - 4 TMDLs from 4 watersheds in the WF-White River Basin.

**Table 1**  
**TMDLs Developed Or Under Development**

Waterbody (WB) Name	303(d) List ID #	Major River Basin	Parameter (s)	Stage of Development	Status
Wildcat Creek, Kokomo Creek	97	Wabash River	DO, NH <sub>3</sub>	TMDL completed	Submitted to EPA12/00/00 Approved, 01/00/01
Grand Calumet River (GCR), E. Branch	8	Lake Michigan	FCA-PCB, Hg Oil & Grease CN, Pesticides	In Contract with U.S. ACOE & ----	Expected Draft due 09/00/03
Grand Calumet River. (GCR) W. Branch	9	Lake Michigan	FCA-PCB, Hg NH <sub>3</sub> , Chlorides CN, Pesticides	In Contract with U.S. ACOE & ----	Expected Draft due 09/00/03
Grand Calumet River (GCR) / Lagoons	10	Lake Michigan	FCA-PCB	In Contract with U.S. ACOE & ----	Expected Draft due 09/00/03
Indiana Harbor Canal (IHC)	11	Lake Michigan	FCA-PCB, Hg Pesticides	In Contract with U.S. ACOE & ----	Expected Draft due 09/00/03
Indiana Harbor Canal,(IHC)/ Lake George,	12	Lake Michigan	FCA-PCB, Hg Oil & Grease Pesticides	In Contract with U.S. ACOE & ----	Expected Draft due 09/00/03
Fall Creek	115	WF. White River	<i>E. coli</i>	In Contract with City of Indianapolis	Expected Draft due 01/15/03
Pleasant Run	137	WF. White River	<i>E. coli</i>	In Contract with City of Indianapolis	Expected Draft due 01/15/03
WF. White River, Marion County (3-Segments)	148 149 154	WF. White River	<i>E. coli</i> <i>E. coli</i> <i>E. coli</i>	In Contract with City of Indianapolis	Expected Draft due 02/21/03
WF. White River, Muncie, Marion & Hamilton Counties (3-Segments)	153 157 158	WF. White River	<i>E. coli</i> <i>E. coli</i> <i>E. coli</i>	In Contract with Tetra Tech, Inc.	Expected Draft due 08/22/03
Little Calumet River (3-Segments)	21 23 24	Lake Michigan	<i>E. coli</i> DO, CN Pesticides	In Contract with Earth Tech	Expected Draft due 08/21/03
Burns Ditch	2	Lake Michigan	<i>E. coli</i>	In Contract with Earth Tech	Expected Draft due 08/21/03
Salt Creek	34	Lake Michigan	<i>E. coli</i>	In Contract with WHP	Expected Draft due 08/21/03
Lake Michigan Indiana Shoreline	17	Lake Michigan	<i>E. coli</i>	In Contract with Tetra Tech Inc.	Expected Draft due 08/22/03
Trail Creek	37	Lake Michigan	<i>E. coli</i>	In Contract with Triad Engineering	Expected Draft due 05/31/03
<b>Total WBs = 1 +14</b>			<b>Total = 2 +28</b>		<b>Total TMDLs = 1+ 14</b>

## TMDLs Developed Or Under Development (Table 1, Cont'd.)

<b>2002 303(d) List</b>					
<ul style="list-style-type: none"> <li>- 2002 303(d) List</li> <li>- Listing Methodology</li> <li>- Response to Comments</li> </ul>				List Public Noticed	<ul style="list-style-type: none"> <li>-March 1, 2002.</li> <li>-Notice Period ended 5/29/02.</li> <li>-List due 10/01/02</li> <li>-Listing Methodology due 10/01/02</li> <li>-Response to Comments due 10/01/02</li> </ul>

### Indiana 2002 303(d) List:

Starting this year, for the development of 2002 303(d) List, IDEM has adopted U.S. EPA's "2002 Integrated Water Quality Monitoring And Assessment Report Guidance". According to the EPA guidance each waterbody that is assessed for water quality will be placed in one of 5 Categories depending on the degree to which it supports the designated uses. The draft 2002 303(d) List was public noticed in the Indiana Register on March 1st with a 90-day comment period that ended on May 29, 2002. Numerous Stakeholders and General Public provided comments on the 303(d) list during the 90-day comment period. The "Response to Comments" document, the 303(d) Listing Methodology (a Long Version and a Fact Sheet) and the 303(d) List itself are due to U.S. EPA Region 5 on October 1, 2002 (see Table 1).

### Summary:

IDEM will continue to work with the Contractors on 14 TMDLs from the 1998 303(d) List for the *E. coli* and other parameters. The TMDLs for the above listed 14 waterbodies after being reviewed and accepted by IDEM, will be forwarded to EPA Region 5 for final review and approval. After the 2002 303(d) List is approved by EPA, another round of TMDLs will be scheduled for completion.

(Continued)

## **De-Listing of Impaired Waterbodies**

### **Water Quality Assessment For TMDLs Development:**

Starting in 1998 to this date, IDEM has endeavored to sample, analyze and collect water quality data for a number of waterbodies listed on the 1998 303(d) List with the purpose to develop the TMDLs. Streams listed for *E. coli* impairments were sampled five times at equally spaced intervals within a 30-day period during the recreational season (April through October) so that a geometric mean could be calculated and compared with the *E. coli* 125/100 ml standard. Streams impaired for physical or chemical parameters were sampled at least 3 times during the sampling season, approximately 3 – 6 weeks apart and compared with the respective water quality standard for the parameter. As part of this sampling and data collection effort, the new data showed that many waterbodies, from one or more major river basins, were no longer impaired for one or more parameters and therefore could be de-listed from the 1998 303(d) List

### **De-Listing of Impaired Waterbodies:**

A complete list of waterbodies from several major river basins that will be de-listed from the 1998 303(d) List is provided in Table 2. It is estimated that 35 Waterbodies for 46 parameters will be de-listed from the 1998 303(d) List. The breakdown of these waterbodies by major river basin is as follows:

- 1 Waterbody from East Fork of White River
- 2 Waterbodies from Kankakee River
- 11 Waterbodies from Lake Michigan
- 4 Waterbodies from Maumee River
- 3 Waterbodies from Ohio River
- 7 Waterbodies from Wabash River
- 7 Waterbodies from West Fork of White River

### **Summary:**

From 1998 through 2002, water quality assessment of impaired waterbodies by IDEM staff has shown that approximately 39 waterbodies, from one or more major river basins, listed on the 1998 303(d) List appear to be no longer impaired for one or more parameters. Therefore, IDEM is not expected to develop approximately 48 TMDLs for the 39 waterbodies and these waterbodies are being recommended to be de-listed from the 1998 303(d) List for the indicated parameters. However, some of these waterbodies will still remain on the 2002 303(d) List for the parameters that will not be de-listed.

**Table 2**  
**List of Waterbodies and Parameters Recommended**  
**To Be De-Listed From 1998 303(d) List**

<b>Waterbody (WB)</b>	<b>303(d) List ID#</b>	<b>Major River Basin</b>	<b>Parameter(s)</b>	<b>Status</b>
Big Blue River	164	EF. White River	Cyanide	New data supports de-listing
Cobb Creek / Breyfogel Ditch	53	Kankakee River	Dissolved Oxygen	New data supports de-listing
Pine Creek	58	Kankakee River	Dissolved Oxygen	New data supports de-listing
Burns Ditch	2	Lake Michigan	Pesticides, Lead	New data supports de-listing
Crawford Ditch	3	Lake Michigan	Copper, Oil & Grease	New data supports de-listing
Grand Calumet River (East Branch)	8	Lake Michigan	Lead, Copper	New data supports de-listing
Grand Calumet River (West Branch)	9	Lake Michigan	Lead, Dissolved Oxygen	New data supports de-listing
Indiana Harbor Canal (IHC)	11	Lake Michigan	Lead, Dissolved Oxygen	New data supports de-listing
Indiana Harbor Canal (Lake George Branch)	12	Lake Michigan	Dissolved Oxygen	New data supports de-listing
Little Calumet River	21	Lake Michigan	Cyanide, Pesticides	New data supports de-listing
Little Calumet River	23	Lake Michigan	DO	New data supports de-listing
Mather's Ditch	27	Lake Michigan	Endrin, Dissolved Oxygen	New data supports de-listing
Mud Creek	28	Lake Michigan	Ammonia , Dissolved Oxygen	New data supports de-listing
St. Joseph River (portion from the Indiana Michigan border in Elkhart County to South Bend)	36	Lake Michigan	<i>E. Coli</i>	New data supports de-listing up to South Bend
Trail Creek	37	Lake Michigan	Cyanide	New data supports delisting
Blue Creek	40	Maumee River	Dissolved Oxygen	New data supports delisting
Garrett City Ditch	42	Maumee River	Ammonia	New data supports delisting
Habegger Ditch	43	Maumee River	Ammonia	New data supports delisting
Swartz-Carnahan Ditch/Tiernan Ditch	48 49	Maumee River	Dissolved Oxygen	New data supports delisting
Cypress Creek	200	Ohio River	Chlordane	New data supports de-listing
Little Pigeon Creek	202	Ohio River	Ammonia	New data supports de-listing
Ohio River	203, 204	Ohio River	Lead	New data supports de-listing
Eel River	68	Wabash River	Cyanide	New data supports de-listing
Little Wildcat Creek/ Kelly West Ditch	78	Wabash River	Dissolved Oxygen	New data supports de-listing
Prairie Creek Ditch	83	Wabash River	Dissolved Oxygen	New data supports de-listing
South Fork Wildcat Creek	84	Wabash River	Cyanide	New data supports de-listing
Tipppecanoe River	91	Wabash River	Cyanide	New data supports de-listing

**List of Waterbodies and Parameters Recommended  
To Be De-Listed From 1998 303(d) List  
(Table 2, Cont'd.)**

<b>Waterbody (WB)</b>	<b>303(d) List ID#</b>	<b>Major River Basin</b>	<b>Parameter (s)</b>	<b>Status</b>
Wabash River	95	Wabash River	Cyanide	New data supports de-listing
Wildcat Creek	97	Wabash River	Cyanide, Lead	New data supports de-listing
Cicero Creek	104	WF. White River	<i>E. Coli</i>	New data supports de-listing
Mars Ditch	132	WF. White River	pH, Cyanide	New data supports de-listing
State Ditch	144	WF. White River	pH, Cyanide	New data supports de-listing
West Fork White River	148	WF. White River	Dissolved Oxygen, Ammonia	New data supports de-listing
West Fork White River	152	WF. White River	Cyanide	New data supports de-listing
West Fork White River	155	WF. White River	Cyanide	New data supports de-listing
Orland Trib.	32			
West Fork White River	160	WF. White River	Lead	New data supports de-listing
<b>Total WBs = 39</b>			<b>Parameters (Total) = 48</b>	<b>39 WBs for 48 parameters will be de-listed</b>

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